AMENDMENTS TO THE CLAIMS

1(original). A method for the preparation of at least one 26-hydroxyepothilone of formula:

$$G_2$$
 R_4
 R_2
 R_3

where:

Q' is selected from the group consisting of

G₂ is the following formula (VI)

$$CH_3-(A_1)_n-(Q_a)_m-(A_2)_0-$$
 (VI)

 A_1 and A_2 are independently selected from the group of optionally-substituted (C_1 - C_3)alkylene and (C_2 - C_3)alkenylene;

Q_a is an optionally-substituted ring system containing one to three rings and at least one carbon to carbon double bond in at least one ring;

n, m, and o are integers independently selected from the group consisting of zero and 1, where at least one of m or n or o is 1;

W is O or NR₆;

X is selected from the group consisting of O, and H, OR₇;

M is O, S, NR_8 , or CR_9R_{10} ;

B₁ and B₂ are selected from the group consisting of -OR₁₁ and -OC(=O)R₁₂;

 R_1 - R_4 and R_{12} - R_{17} are selected from the group consisting of H, alkyl, substituted alkyl, aryl, and heterocyclo, except R_{15} is not hydrogen, and when R_1 and R_2 are alkyl, they can be joined to form a cycloalkyl;

R₆ is selected from the group consisting of H, alkyl, and substituted alkyl;

R₇ and R₁₁ are selected from the group consisting of H, alkyl, substituted alkyl, trialkylsilyl, alkyldiarylsilyl, and dialkylarylsilyl;

 R_8 is selected from the group consisting of H, alkyl, substituted alkyl, $R_{13}C(=0)$ -, $R_{14}OC(=0)$ -, and $R_{15}S(0)_2$ -; and

 R_9 and R_{10} are selected from the group consisting of H, halogen, alkyl, substituted alkyl, aryl, heterocyclo, hydroxy, $R_{16}C(=O)$ -, and $R_{17}OC(=O)$ -;

the pharmaceutically-acceptable salts thereof and any hydrates, solvates, or geometric, optical and stereoisomers thereof;

comprising the steps of:

a) contacting at least one epothilone of formula IVa

$$G_2$$
 R_4
 R_2
 R_3
 R_3
 R_4
 R_3
 R_4
 R_3
 R_4
 R_3
 R_4
 R_4
 R_5
 R_7
 R_8

where:

$$Q$$
 is Q is

R₅ is -CH₃; and

W, X, G_2 , M, B_1 , B_2 , R_1 - R_4 , and R_6 - R_{17} are defined above;

the pharmaceutically-acceptable salts thereof and any hydrates, solvates, or geometric, optical and stereoisomers thereof;

with a microorganism or enzyme derived therefrom capable of selectively catalyzing the hydroxylation of said R₅ group to -CH₂OH; and

b) effecting said hydroxylation.

2(original). The method of claim 1 wherein n is zero and m is 1.

3(original). The method of claim 1 wherein n is zero, m is 1, and A₂ is alkenyl.

4(Previously presented). The method of claim 1 wherein G₂ is

5(canceled).

6(original). The method of claim 1 wherein Q is

7(previously presented). The method of claim 6 wherein G_2 is

8(original). The method of claim 7 wherein said epothilone of formula IVa is epothilone B and said 26-hydroxyepothilone is 26-hydroxyepothilone B.

9(canceled).

10(currently amended). The method of claim $\underline{1}$ 9 wherein said Q is

11(previously presented). The method of claim 10 wherein G_2 is

12(original). The method of claim 11 wherein said epothilone of formula IVa is epothilone D and said 26-hydroxyepothilone is 26-hydroxyepothilone D.

13-17(canceled).